

CLAIMS

1. A rubber-reinforced vinyl resin, which is obtained by polymerizing 95 to 20 % by weight of a vinyl monomer (B) in a presence of 5 to 80 % by weight of a rubber-like copolymer (A) comprising at least two members selected from the below described components (I) to (III), provided that (A) + (B) = 100 % by weight:

Component (I):

a rubber-like copolymer which is obtained by 10 polymerizing monomers comprising the mixture of ethylene, an α -olefin having 3 to 20 carbon atoms and a non-conjugated diene at a ratio of 30 to 95/70 to 5/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity ($ML_{1+4}@125^{\circ}\text{C}$) of 15 15 or higher, excluding the below described the component (III);

Component (II):

a rubber-like copolymer which is obtained by 20 polymerizing monomers comprising the mixture of ethylene, 1-octene and a non-conjugated diene at a ratio of 50 to 99/50 to 1/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity (ML₁₊₄@125°C) of less than 15; and

Component (III):

25 a rubber-like copolymer which is obtained by polymerizing monomers comprising the mixture of ethylene,

1-octene and a non-conjugated diene at a ratio of 50 to 99/50 to 1/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity (ML₁₊₄@125°C) of 15 or higher.

5

2. A rubber-reinforced vinyl resin according to claim 1, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said component (I) or (III) and 90 to 10 % by weight of said component (II), provided that (I) + (II) = 100 % by weight or (II) + (III) = 100 % by weight.

10

3. A rubber-reinforced vinyl resin according to claim 1, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said component (I) and 90 to 10 % by weight of said component (III), provided that (I) + (III) = 100 % by weight.

15

4. A process for producing a rubber-reinforced vinyl resin, which comprises polymerizing 95 to 20 % by weight of a vinyl monomer (B) in a presence of 5 to 80 % by weight of a rubber-like copolymer (A) comprising at least two members selected from the below described components (I) to (III), provided that (A) + (B) = 100 % by weight:

Component (I) :

a rubber-like copolymer which is obtained by polymerizing monomers comprising the mixture of ethylene, an α -olefin having 3 to 20 carbon atoms and a non-conjugated diene at a ratio of 30 to 95/70 to 5/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity ($ML_{1+4}@125^{\circ}C$) of 15 or higher, excluding the below described the component (III);

10 Component (II) :

a rubber-like copolymer which is obtained by polymerizing monomers comprising the mixture of ethylene, 1-octene, and a non-conjugated diene at a ratio of 50 to 99/50 to 1/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity ($ML_{1+4}@125^{\circ}C$) of less than 15; and

Component (III) :

a rubber-like copolymer which is obtained by polymerizing monomers comprising the mixture of ethylene, 1-octene and a non-conjugated diene at a ratio of 50 to 99/50 to 1/0 to 20 respectively on weight percent basis, wherein the rubber-like copolymer has a Mooney viscosity ($ML_{1+4}@125^{\circ}C$) of 15 or higher.

25 5. A process according to claim 4, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said

component (I) or (III) and 90 to 10 % by weight of said component (II), provided that (I) + (II) = 100 % by weight or (II) + (III) = 100 % by weight.

5 6. A process according to claim 4, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said component (I) and 90 to 10 % by weight of said component (III), provided that (I) + (III) = 100 % by weight.

10 7. A rubber-reinforced vinyl resin composition, which comprises the rubber-reinforced vinyl resin defined in claim 1 and another thermoplastic resin, in which the rubber-like copolymer (A) constitutes 5 to 70 % by weight of the rubber-reinforced vinyl resin composition.

15

8. A composition according to claim 7, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said component (I) or (III) and 90 to 10 % by weight of said component (II), provided that (I) + (II) = 100 % by weight or (II) + (III) = 100 % by weight.

20 9. A composition according to claim 7, in which the rubber-like copolymer (A) comprises 10 to 90 % by weight of said component (I) and 90 to 10 % by weight of said component (III), provided that (I) + (III) = 100 % by weight.